



JC10 Rec'd PCT/PT 06 MAY 2005 CT #3
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/523,929
Filing Date: February 7, 2005
Applicant(s): Hans-Dieter FEUCHT et al.
Group Art Unit: Unknown
Examiner: Unknown
Title: RECOGNITION LAYERS MADE OF HYDROGEL BASED
ON POLYACRYLAMIDE FOR USE IN BIOSENSOR
TECHNOLOGY
Attorney Docket: 32860-000848/US

Customer Service Window
Randolph Building
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Alexandria, VA 22314
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May 6, 2005

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form PTO-1449 attached hereto.

II. COPIES

A. ☒ Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) for each cited pending unpublished U.S. application listed below in Section IV, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B. ☐ Any patents, publications or other information which are listed on Form PTO-1449 or on the copies of Form PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

C. ☒ Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form PTO-1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form PTO-1449 are enclosed herewith.

D. ☐ This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search Report are listed on the attached Form PTO-1449 for consideration by the Examiner and for listing on any patent resulting from this application. Since the International Search Report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g))

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

A. ☒ Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B. ☒ A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

1. ☐ See the attached foreign patent office communication from a counterpart foreign application:
2. ☐ English translations are provided for:
3. ☒ Other: An English abstract has been provided for German Patent No. DE 102 36 460.

C. ☒ The following additional information is provided for the Examiner's consideration:

See Attachment A for relevancy information and further information regarding the cited U.S. and foreign patents.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A. ☐ The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.

Filing Date

Art Unit

V. THIS IDS IS BEING FILED UNDER

A. ☒ 37 C.F.R. § 1.97(b): (check only one box)

1. ☐ within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

2. ☒ within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.

3. ☐ before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

4. ☐ before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. ☐ 37 C.F.R. § 1.97(c): (check only one box)

☐ before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1. ☐ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

2. ☐ See the certification below. No fee is required.

C. ☐ 37 C.F.R. § 1.97(d):

☐ after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. ☐ See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A. ☐ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. § 1.704(d) below in section VII, if applicable; or

B. ☐ no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. ☐ Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 C.F.R. § 1.704(d)

The undersigned hereby states that:

☐ each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

- A. ☐ No fee is believed to be due in light of the above-provided certification.
- B. ☐ A check in the amount of \$180.00 is enclosed for the above-identified fee.
- C. ☐ Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. §§ 1.16 or 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By


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DJD/bof

Enclosures:



Form PTO-1449
Documents
Fee
Other: Attachment A

**ATTACHMENT A LISTING RELEVANCY INFORMATION AND
FURTHER INFORMATION REGARDING THE CITED
U.S. AND FOREIGN PATENTS**



**The following new references are being cited in Applicants' Information
Disclosure Statement filed on May 6, 2005:**

U.S. Patent No. 6,372,813
U.S. Patent No. 6,180,770
DE Patent No. DE 102 36 460
"Light-directed, Spatially Addressable
Parallel Chemical Synthesis" - also cited in the Substitute Specification
"BioMolecular Screening Catalog" - also cited in the Substitute Specification
"Regioselective Immobilization of short
oligonucleotides to acrylic copolymer gels" - also cited in the Substitute Specification
"Redoxproteinschichten auf leitenden
Trägern – Systeme für bioelektronische
Anwendungen" - also cited in the Substitute Specification

**The following references were cited in Applicants' Information Disclosure
Statement filed with the original application on July 23, 2003:**

U.S. Patent No. 5,596,038 - also cited in the International Search
Report
U.S. Patent No. 5,428,076 - also cited in the International Search
Report
U.S. Patent No. 5,972,375 - also cited in the International Search
Report
PCT Pub. No. WO 00/31148 - also cited in the International Search
Report
PCT Pub. No. WO 00/43539 - also cited in the International Search
Report and in the Substitute
Specification
"Fabrication of Microarray of Gel-Immobilize
Compounds on a Chip by copolymerization" - also cited in the International Search
Report
"Fiberoptic DNA Sensor Array Capable of
Detecting Point Mutations" - also cited in the International Search
Report
"Binding Specificity and stability of duplexes
formed by modified Oligonucleotides with a
4096-hexanucleotide microarray" - also cited in the International Search
Report



PTO/SB/08b(05-03)
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	10/523,929
Filing Date	23.07.2003
First Named Inventor	Dr. Hans-Dieter Feucht
Group Art Unit	UNKNOWN
Examiner Name	UNKNOWN
Attorney Docket Number	32860-000848/us

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	9	Fabrication of Microarray of Gel-Immobilized Compounds on a Chip by Copolymerization, Bio Techniques, Vol. 27, No. 3 (1999), 592-606, US, A.V. VASILISKOV et al.	
	10	Fiberoptic DNA Sensor Array Capable of Detecting Point Mutations, Analytical Biochemistry, Academic Press, San Diego, US, 251, 270-279 (1997), HEALEY et al	
	11	Binding specificity and stability of duplexes formed by modified oligonucleotides with a 4096-hexanucleotide microarray, Nucleic Acids Research, 2001, Vol. 29, No. 12, 2626-2634, Oxford Univ. Press, Surrey, GB, TIMOFEEV et al.	
	12	Light-directed, Spatially Addressable Parallel Chemical Synthesis, Science 251, 767-773 (1991) FODOR et al.	
	13	BioMolecular Screening Catalog 2001, Fa. Schleicher und Schüll	
	14	Regioselective immobilization of short oligonucleotides to acrylic copolymer gels, Nucleic Acids Research, Vol. 24, No. 16 (1996) 3142-3148, TIMOFEEV et al.	
	15	Redoxproteinschichten auf leitenden Trägern – Systeme für bioelektronische Anwendungen, Angw. Chemie 2000, 1230-1269, Wiley Verlag GmbH, WILLNER et al.	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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